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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,778	10/18/2001	Yutaka Doi	H0001800 DIV (4960)	7149

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EXAMINER

TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,778

Applicant(s)

DOI, YUTAKA

Examiner

Minh Trinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of the "conditional" request for RCE application is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nurse et al (US 5,263,111).

Regarding claim 21, Nurse et al teach the claimed method of the present invention including providing a substrate layer 12 (see various related figures 1, 16 and 17, col. 4, lines 45-66); and a solid, planar, passive, single optical wave-guide 22 (see Figs 1-24, which shows wave guide 22) laminated onto the substrate layer 12 (see structure 10 of fig. 1 and or other related figs, discussed col. 4, lines 45-65, and col. 7, lines 10-68). Nurse et al inherently disclose the wave-guide being polymer based (see col. 3, lines 3-5). Further, regarding the wave-guide is photo bleached or doped. It would have been an obvious matter of design choice to pick and choose any desired wave guide in form of photo bleached or doped (note that either of the material is well known to the art) since applicant has not disclosed that the use of photobleached or

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doped is critical, patentably distinguishing features and it appears that the invention would perform equally well with the material as disclosed by the prior art reference (see the discussion at col. 3, lines 40-45, etc.,).

Regarding claim 22, Nurse et al teach at least one of a laminating material or a cladding material coupled to the wave-guide (see Fig. 1, item 20).

Regarding claim 23, Nurse et al teach at least one additional layer (see Fig. 17, item number 26') coupled to the laminating material or the cladding material.

Regarding Claim 24, Nurse et al teach that the wave-guide is partially etched at a 45° etched angle (column 10, line 68, column 11, line 1).

Regarding claim 25, Nurse et al teach that the substrate comprises at least two layers of materials (Reference number 12, 14,16,18).

Regarding claim 26, Nurse et al teach that the at least two materials comprises silica wafers, dielectric materials, adhesive materials, resins, metals, metal alloys, and composite materials.

Regarding claim 27, Nurse et al teach that the wave-guide comprises a silicon-based material (column 1, lines 26-33).

4. Claims 21-27 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Nurse et al (US 5,263,111) in view of Nashimoto et al (US 6,078,717).

Nurse et al is silent about the wave guide is doped. Nashimoto et al teach the wave guide is doped (see the discussion at col.11, lines 28-19). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

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made to employ Nashimoto's teaching as described above onto the method invention of Nurse et al in order to form a optical guide device which meet manufacturing requirements. The motivation for this combination is discussed at col. 10, lines 10-11 of Nashimoto et al.

Limitations of claims 22-17 are also met by Nurse et al as the discussion above (see Paragraph 3).

Prior Art References

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of method of manufacturing wave guide device, or the like.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



Minh Trinh 6/28/04
Patent Examiner Group 3729

mt